

THE SUBGENUS *Tritolestes* Ghesquière OF THE GENUS  
*Cryptochetum* Rondani WITH A NEW SPECIES  
FROM PAKISTAN

(DIPTERA: CRYPTOCHETIDAE)

GEORGE C. STEYSKAL, *Systematic Entomology Laboratory, Agricultural Research Service, U.S. Department of Agriculture*<sup>1</sup>

ABSTRACT—The subgenus *Tritolestes* of the genus *Cryptochetum* is shown to consist of 5 species, 4 from Africa and *C. (T.) ghanii*, new species, from Karachi, Pakistan, and a key to the species is given.

The family Cryptochetidae consists of the single genus *Cryptochetum* Rondani (1875:167). The name of the genus has usually been spelled *Cryptochaetum*, but Rondani's original spelling on page 167 and in the index on page 190 was with the simple "e", although on page 172 it is spelled *Cryptochoetum*. Ghesquière (1942:405) established the subgenus *Tritolestes* for species with the frontal triangle acutely pointed anteriorly and not attaining the frontal margin. He included the 2 species *C. melanum* Ghesquière and *C. aspidoprocti* Ghesquière and designated the former as type of the subgenus. The name *melanum* should be emended to *melan* because the gender forms of that adjective are *melas* (masc.), *melaena* (fem.), and *melan* (neuter). In a paper that appeared only the year before Ghesquière's, Thorpe (1941) described 2 new species, *C. striatum* and *C. idiocerum*, without reference to subgenera. It is obvious however that those 2 species should be referred to *Tritolestes*.

The following new species is very similar to the type of *Tritolestes*, and represents the first record of a species of that subgenus from outside Africa.

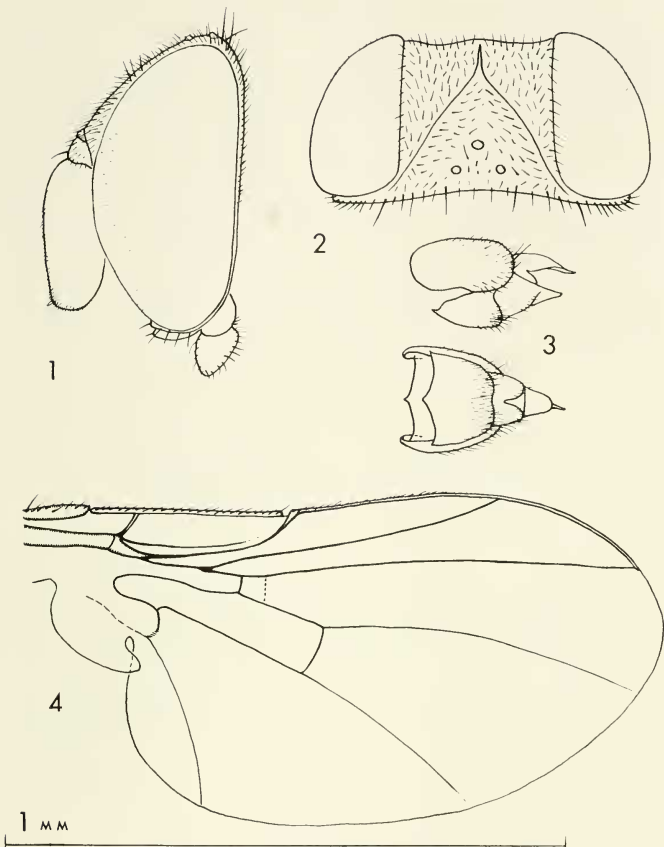
***Cryptochetum (Tritolestes) ghanii*, n. sp.**

(Figs. 1-4)

Female. Length of body 1.3-1.4 mm, of wing 1.07-1.18 mm. Color generally more or less shining black, only tarsi yellowish; thorax and frontal triangle with slight dark bluish glint; abdomen rather strongly metallic greenish to bluish; front outside triangle matt black; face and antenna grayish tomentose; wing hyaline; all bristles and hairs black.

Head as in figs. 1 and 2; frontal triangle abruptly narrowed forward to aculeate point not attaining anterior frontal margin; antenna 2.4 times as long as wide, elliptical, with subapical dorsal spinule; cheeks very narrow, scarcely apparent in profile, bearing several short bristles; eyes with short sparse hairs.

<sup>1</sup> Mail address: c/o U.S. National Museum, Washington, D.C. 20560.



Figs. 1-4, *Cryptochetum (Tritolestes) ghanii*, n. sp.: 1, head in profile; 2, same, dorsal view; 3, lateral and ventral views of female postabdomen; 4, right wing (dotted line indicates position of *ta* in one paratype).

Thorax as in most species of the genus; mesoscutum covered with rather dense short hairs, those in middle approximately 0.035 mm long. Legs without distinctive characters; tarsal segments of fore leg from base distad as 3.7, 1.3, 1.0, 0.8, 1.2.

Wing as in fig. 4; tip of discal cell convex because *tp* is bent outward or at least somewhat retracted before meeting 5th vein; costa hardly surpassing tip of

3rd vein; length of *tp* not more than  $\frac{1}{4}$  that of last section of 5th vein; 3rd and 4th veins arcuate and divergent, their tips 2.3 times as far apart as width of submarginal cell at *tp*.

Abdomen without apparent distinctive characters; postabdomen as in fig. 3 (drawn in water from preparation macerated in NaOH solution).

Holotype and 5 paratypes, ♀, Karachi, Pakistan, 13 August 1969 (M. A. Ghani), ex scale insect *Icerya seychellarum* (Westwood) on grass *Cynodon dactylon* Rich., no. 70849 in U.S. National Museum; right wings of holotype and 2 paratypes on microscope slides in euparal. postabdomen of holotype in glycerine in microvial attached to pin bearing remainder of specimen.

I am pleased to dedicate the name of the species to its collector. *C. ghanii* is apparently most similar to the type of the subgenus *Tritolestes*, *C. melan* Ghesquière, differing as shown in the key below.

#### KEY TO SPECIES OF *Cryptochetum* SUBGENUS *Tritolestes*

- 1 (2) Area of front adjacent to frontal triangle with broad zone of fine striae parallel to margins of triangle; shortest distance between ocelli greater than shortest distance from ocellus to margin of triangle; 3rd antennal segment not tapering, with acute anterior apex, 2.3 times as long as wide, not attaining level of lower margin of eye; wing with costa extending to 4th vein, 3rd and 4th veins parallel distally, anterior distal corner of discal cell  $110^\circ$ , *tp* equal in length to last section of 5th vein; length of body 2.75 mm, of wing 1.9 mm  
..... *C. striatum* Thorpe
- 2 (1) Front without striation; shortest distance between ocelli less than shortest distance from ocellus to margin of triangle; antenna rounded apically, either strongly tapering and extending below level of lower margin of eye or oval and not attaining level of lower margin of eye; wing venation and size various.
- 3 (4) Third antennal segment 3.6 times as long as wide, strongly tapering to narrow rounded tip ventrad of lower margin of eye; wing with costa extending no more than slightly beyond 3rd vein, 3rd and 4th veins arcuate, gently diverging, anterior distal corner of discal cell rectangular, *tp*  $\frac{1}{3}$  length of last section of 5th vein; large species, body length 5 mm, wing length nearly 3 mm  
..... *C. idiocerum* Thorpe
- 4 (3) Third antennal segment oval or elliptical, not more than 2.5 times as long as wide, not attaining level of lower margin of eye; wing venation various; smaller species, length of body not more than 2.2 mm.
- 5 (6) Costa attenuate beyond tip of 3rd vein, but attaining 4th vein; 4th vein sinuate, distally parallel to 3rd vein; anterior distal corner of discal cell  $130^\circ$ ; *tp* a little longer than last section of 5th vein; length of body 2.1–2.2 mm, of wing ? (known only from male) ..... *C. aspidoprocti* Ghesquière
- 6 (5) Costa at most slightly exceeding 3rd vein; 3rd and 4th veins gently arcuate, divergent; anterior distal corner of discal cell approximately  $100^\circ$ ; *tp* much shorter than last section of 5th vein; length of body not more than 1.6 mm (known only from females).

- 7 (8) *Tp*  $\frac{1}{2}$  length of last section of 5th vein; tip of discal cell concave, lower corner acute; length of body 1.4–1.6 mm, of wing ? (Congo) .....  
 ..... **C. melau** Chesquière
- 8 (7) *Tp* approximately  $\frac{1}{4}$  length of last section of 5th vein; tip of discal cell convex, lower corner obtuse; length of body 1.3–1.4 mm, of wing 1.07–1.18 mm (coastal Pakistan) .....  
 ..... **C. ghanii**, n. sp.

## REFERENCES

- Ghesquière, J.** 1942. Recherches sur les Diptères d'Afrique. II. Notice monographique sur les Muscoïdes *Cryptochaetidae*, parasites de Coccides Monophlebinae. Rev. Zool. Bot. Afr. 36:390–410.
- Rondani, C.** 1875. Species italicae ordinis dipterorum (Muscaria Rndn.) collectae et observatae. Bull. Soc. Ent. Ital. 7:166–191.
- Thorpe, W. H.** 1941. A description of six new species of the genus *Cryptochaetum* (Diptera-Agromyzidae) from East Africa and East Indies; together with a key to the adults and larvae of all known species. Parasitology 33: 131–148.

**A NOTE ON THE SYNONYMY OF  
 ANTISSOPS DENTICULATA ENDERLEIN**

(DIPTERA: STRATIOMYIDAE)

In 1914, Enderlein erected the genus *Antissops* on the basis of a single male specimen from Costa Rica which he described as *Antissops denticulata*. Apparently Enderlein was unsure of the correct placement of this genus and after including it in the subfamily Pachygastrinae, he later (Enderlein, 1920) transferred it to the Beridinae. At this time he added a second species, *Antissops barbiellinii*, which had been previously described by Bezzi in 1908, as *Allognosta barbiellinii*.

In association with my studies on the Stratiomyidae of Mexico, I found a specimen from the state of Chiapas in Mexico that had been identified as *Antissops denticulata* but which was remarkably similar to another species, *Berismyia fusca*, which had been described by Giglio-Tos in 1893.

With the gracious assistance of Frau A. Draber-Monko of the Institute of Zoology at the Polish Academy of Sciences in Warsaw, I was able to determine that except for sexual differences, the type of *Antissops denticulata* and the specimen from Chiapas, Mexico, are conspecific and therefore, *Antissops denticulata* Enderlein must be considered as a junior synonym of *Berismyia fusca* Giglio-Tos.

On the basis of Enderlein's illustration of the wing and antenna of *Antissops barbiellinii* (= *Allognosta barbiellinii* Bezzi) I am reasonably confident that this species is not congeneric with *Antissops* (= *Berismyia*) but final disposition must await examination of the holotype.

Information Paper, College of Agriculture, Washington State University. Work was conducted under Projects 9043 and 1939. The author is indebted to the National Science Foundation Grant GB-15774 for partial financial support of this project.—M. W. McFADDEN, Department of Entomology, Washington State University, Pullman, Washington 99163.